

1 **ABSTRACT OF THE DISCLOSURE**

2 The invention provides semiconductor processing methods of
3 depositing SiO_2 on a substrate. In a preferred aspect, the invention
4 provides methods of reducing the formation of undesired reaction
5 intermediates in a chemical vapor deposition (CVD) decomposition
6 reaction. In one implementation, the method is performed by feeding
7 at least one of H_2O and H_2O_2 into a reactor with an organic silicon
8 precursor. For example, in one exemplary implementation, such
9 components are, in gaseous form, fed separately into the reactor. In
10 another exemplary implementation, such components are combined in
11 liquid form prior to introduction into the reactor, and thereafter
12 rendered into a gaseous form for provision into the reactor. The
13 invention can be practiced with or in both hot wall and cold wall CVD
14 systems.

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